DOCUMENT RESUME

ED 376 217 TM 022 359

AUTHOR Heidotting, Terri; And Others
TITLE A Quantitative Synthesis of Child Sexual Abuse Prevention Programs.
PUB DATE Apr 94
NOTE 34p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 4-8, 1994).
PUB TYPE Information Analyses (070) -- Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Child Abuse; Comparative Analysis; *Effect Size; Elementary Education; Elementary School Students; Followup Studies; Knowledge Level; Mathematics Tests; *Meta Analysis; *Preschool Children; Preschool Education; Pretests Posttests; Prevention; *Program Evaluation; Research Methodology; Retention (Psychology); *Sexual Abuse; Synthesis; Teaching Methods

ABSTRACT

The objective of this study was to evaluate quantitatively through meta analysis the effectiveness of child sexual-abuse prevention programs conducted over the past 10 years. Eighteen controlled studies evaluating such programs were coded for salient features and study outcomes and were then described using the common scale of effect size. An overall effect size was calculated, using each of the 18 studies as a single data point. The results were striking. In comparing the effects of prevention programs to control group performances, a mean effect size of 0.57 was calculated, which indicated a moderate effect on posttest knowledge. Follow-up retention scores across studies also reported a medium effect size of 0.47 from 2 weeks to 1 year following training. Moreover, preschool-age children demonstrated large effect sizes on posttest and follow-up scores, while school-age children demonstrated moderate effects. The method of program presentation was found to have differential effects on student performance, with active, behavioral teaching methods more effective. The implication of this meta analysis is that a brief training program appears to be an effective, economical method of imparting sexual-abuse prevention strategies to children. Contains three tables, two figures, and 26 references. (Author/SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED376217

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
TERRI HEIDOTTING
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Quantitative Synthesis of Child Sexual Abuse Prevention Programs

Terri Heidotting
Susan Keiffer
Suzanne Wegener Soled

University of Cincinnati
College of Education
Cincinnati, Ohio 45221-0002
(513) 556-3517

Running Head: CHILD SEXUAL ABUSE PREVENTION REVIEW

Paper presented at the annual meeting of the
American Educational Research Association
New Orleans, April 1994

TM022359

BEST COPY AVAILABLE

ABSTRACT

The objective of this study was to quantitatively evaluate the effectiveness of child sexual abuse prevention programs conducted over the past ten years through the meta-analytic method. The urgency of such analysis is reflected in the public awareness of the prevalence of child sexual abuse, and questions regarding the quality and efficacy of primary prevention programs in practice. Controlled studies evaluating these programs were obtained through six databases and a manual search. Studies were coded for salient features and study outcomes, and were then described using the common scale of effect size. Eighteen studies met criteria for inclusion. An overall effect size was calculated, using each of the eighteen studies as a single data point. The results of this meta-analysis are striking. In comparing the effects of prevention programs to control group performances, a mean effect size of .57 was calculated, which indicated a moderate effect on posttest knowledge. Follow-up retention scores across studies also reported a medium effect size of .47 from two weeks to one year following training. Moreover, preschool age children demonstrated large effect sizes on posttest and follow-up scores, while school age children demonstrated moderate effects. The method of program presentation was found to have differential impacts on student performance, where active, behavioral teaching methods were more effective. The implication of this meta-analysis is that a brief training program appears to be an effective, economical method of imparting sexual abuse prevention strategies to children.

A Quantitative Synthesis of Child Sexual Abuse Prevention Programs

The increase in public awareness of child sexual abuse over the last decade has highlighted the devastating effects that result (Grendel, 1991). Sexually abused children may be victimized with affective disturbances, physical problems, and sociobehavioral disturbances. Negative effects on emotional, cognitive, sexual, and interpersonal adjustment may continue into later adult years (Wurtele, Miller-Perrin, 1992).

In response to these costs, public policy has encouraged and required that schools educate children with sexual abuse prevention programs. These are "primary" prevention programs directed at hypothetically non-sexually abused children with the intent of preventing the occurrence of an abusive event through prior education (Grendel, 1991; Wurtele, Miller-Perrin, 1992). These programs hope to decrease the possibility of sexual victimization by broadening the child's resources in guarding against abuse or for seeking help when faced with potential sexual abuse situations. Such resources may emphasize knowledge about sexual abuse, supportive community resources,

personal safety skills, or the importance of self-esteem (Wurtele, Miller-Perrin, 1992).

Recently, concerns have been raised as to the quality and efficacy of the sexual abuse prevention programs that exist. In a review of the current status of these programs. Wurtele (1990a) notes that the number of different sexual abuse prevention programs greatly exceeds the number of program evaluations. Possible reasons for this include a lack of resources or expertise necessary for quality evaluations. Likewise, the potential attractiveness of such a program should not mask the responsibility for systematic analysis of its efficacy (Grendel, 1991). Wurtele (1990a) emphasizes that without an empirical basis for effectiveness, programs may not receive the funding necessary to continue despite the possible beneficial impact.

One difficulty encountered in making program evaluations has been the variability that exists in the method and materials of program presentation. Wurtele (1987), in a review of widely available programs, reports a variety of program presentations, including printed materials, theatrical performances, lecture format, group discussion, and audiovisual materials. Conte (1986) found similar variability and includes

anatomically correct dolls to the list.

Other difficulties encountered when applying prevention programs occur when selecting an age appropriate program. Conte (1986) and Wurtele (Wurtele, Miller-Perrin, 1992) urged care when selecting from the available materials, since the developmentally appropriate level of different methods still needed to be assessed.

Also, a lack of standardization of child assessment measures contributes to the confusion when evaluating prevention programs, and establishment of normative data becomes difficult (Wurtele, Miller-Perrin, 1992). Several general factors were reviewed by Wurtele (1990a) as having been used to evaluate the impact of these programs on the child. Such factors were increases in the child's conceptual knowledge about sexual abuse (remembering), increases in the child's recognition of potential sexual abuse situations (recognition), increases in personal safety skill knowledge and sense of control over personal bodily space (resisting), and potential and incidence for disclosures (reporting). Wurtele emphasizes that all of these factors should be represented in the goals of prevention programs.

Examination of empirical studies of child sexual

abuse prevention programs may help to organize some of the available research with hopes of evaluating the factors influential to effective sexual abuse prevention programs for children. In this study, prevention programs were quantitatively evaluated for effectiveness using the meta-analytic method. This synthesis of empirical studies sought to answer three questions. First, were current prevention programs effective, and how large would their overall impact be on student knowledge? Second, which methods of presentation were particularly effective for the students? Third, were prevention programs productive for preschool children (ages 5 and under) and school age children (ages 6-11)?

Method

The meta-analytic approach used in this review was similar to that described by Cooper (1989) and Hedges, Shymansky, & Woodworth (1989), which requires the reviewer:

- *to locate studies of an issue through objective, replicable search
- *to code the studies for salient features, and
- *to describe study outcomes on the common scale of effect sizes.

Definition

Child sexual abuse prevention programs are "primary" prevention programs. These are programs aimed at hypothetically non-sexually abused children with the goal of providing the child with the necessary skills to avoid sexual abuse. "School-based" prevention programs were derived as an economical means of implementating these programs to a large number of children. These school-based programs were also the result of public policy mandates that required these programs to be implemented.

Search Procedure

Eight resources were used to search the literature and reports concerning the effect of child sexual abuse prevention training upon student knowledge of sexual abuse and hypothetical behavioral responses to potential abusers. Six data bases of the Educational Resource Information Center (ERIC), Psychological Abstracts (PSYCHLIT), Dissertation Abstracts, Social Science Abstracts, Medical Abstracts (MEDLINE), and the University of Cincinnati Library catalog (UCLID) were searched by computer for the years of 1983 through Jan. 1993. This chronological limit was placed upon our data due to the recency of the implementation and evaluation of these prevention programs. The descriptors used for these searches included: child

sexual abuse prevention, child abuse, sexual abuse, child sexual abuse education, and personal safety. Four hundred-eighty studies were identified by titles and abstracts. This initial pool was reduced to 207 potentially useful documents. Due to time constraints, the decision was made to employ a "pilot analysis" of child sexual abuse prevention program studies readily available through the University of Cincinnati and Xavier libraries. Consequently, our sample contains an extreme publication bias, with the expected inflation of significance of results (Cooper, 1989) and any preliminary conclusions should be tempered accordingly. Eleven empirical studies retrieved in these computer searches provided approximately half of the data for our analysis.

Child Abuse and Neglect was searched manually for relevant studies for years 1988 through 1992. All bibliographies of articles were also searched. We obtained access to the files of two primary researchers in the field of child primary sexual abuse prevention, Dr. Suzanne Wegener and Beth Hensley of the University of Cincinnati. These additional searches produced 150 references for evaluation. Fifty-three articles were chosen from this pool, of which seven were selected for the final analysis.

To qualify for use in this meta-analysis, studies had to meet several methodological criteria. First, the results of the study had to be reported in quantitative form, such as means, standard deviations, or F-values. Studies evaluating achievement qualitatively could not be analyzed on the common scale of effect sizes that would be used. Second, experimental or quasi-experimental control group that did not receive the sexual abuse prevention program at the time of evaluation had to be available in the reported results. This may have taken the form of an alternative treatment program unrelated to sexual abuse prevention, or the students may have received the sexual abuse program only *after* evaluation for inclusion in the results were made. The decision was made to include only studies using a non-equivalent control group. Studies using a repeated measures, pretest-posttest design were not included. All control groups used in the selected studies were a "delayed" control. Children received the sexual abuse prevention program after completion of the evaluations since the withholding treatment would have been considered unethical. Third, the studies had to take place in actual classrooms; thus studies describing home-based instruction or individualized tutoring were excluded.

Finally, only those studies utilizing dependent measures which specifically assessed student comprehension, knowledge, transfer and retention of child sexual abuse prevention concepts and strategies were included. The efficacy of instructor type, student enjoyment, and student fear were also not included in this analysis.

Eighteen studies contained useful results on the evaluation of student knowledge and behavioral responses following a brief child sexual abuse prevention program. Publication dates ranged from 1985 to 1992.

Variables

A coding sheet was devised to ensure consistency in the definition and description of the major features in each study (see Appendix). The form was divided into eleven sections. The initial coding section was study identification. This included author name, year of publication, and source of article. Secondly, a school variables section recorded information such as SES and geographic location. Third, student subject variables were described in terms of sample size, age, gender, ethnicity, and attrition. Fourth, the experimental design used in the study was coded for control groups and matching factors. Treatment

characteristics were coded as to the method of treatment, student grouping for training, number of students per group, number of conditions of treatment, duration of treatment, frequency of treatment, utilization of pretest/posttest/follow-up evaluations, and the time intervals between posttesting and follow-up conditions. Section six describes the pedagogical format of treatment through a checklist of fifteen methods: lecture, role playing, rehearsal, feedback, shaping, multimedia, film, discussion, literature, homework, generalization techniques, modeling, practicing self protection skills, social reinforcement, interviewing, and the commercial availability of the treatment program. Section seven described the method of treatment implementation, such as by teacher, professional or student. Section eight coded control group information for number of students, format, implementation, duration and frequency. Section nine recorded experimental and statistical controls for threats to validity, such as matching, randomization, covariates and blind conditions. Finally, a chart displaying statistical data recorded the number of subjects for treatment and control conditions, means, standard deviations, degrees of freedom, t values, F

values, and probability values for each dependent measure and for pretest/posttest/follow-up conditions. The remaining space was provided for qualitative descriptions possibly needed which were not previously coded.

Analysis

In coding study outcomes, our goal was to overcome the difficulties encountered by different scales of measurement. For example, studies measured achievement effects through paper and pencil questionnaires, through interview techniques, or through hypothetical behavioral responses to videotaped scenarios. For a statistical analysis, the results needed to transformed to a common scale.

The meta-analytic approaches of Cooper (1989) and Hedges, et al. (1989) were used to transform the empirical results of the studies into a common effect size measurement. This effect size measurement was defined as the difference between the mean scores of the experimental and control groups divided by the standard deviation of the control group. The control group standard deviation was used in order to provide a more conservative effect size estimate. All but two of the studies utilized in this meta-analysis reported means and standard deviations. The remaining two

reported F values.

Some studies reported more than one assessment measure of student understanding of prevention concepts and skills. As a result, the number of effect sizes within each study ranged from 1 to 18 for both posttesting and follow-up studies. To avoid having a few studies with a large number of effect sizes bias the statistical results, a shifting unit of analysis was chosen for this review for the dependent measures and for preschool and school age children. For the overall effect measures of posttest and follow-up, the study was used as the unit of analysis. Here, the mean effect size was calculated for each study and used as a single data point.

Further, a weighting factor (w_i) (Cooper, 1989) was calculated for each group variable for the number of subjects. This accounted for the differences in sample sizes when comparing effects.

Confidence intervals (95%) were calculated around the average effect sizes using the formula in Cooper (1989), see Table 2 for formulas. Intervals that contain the effect size value of d=0 support the null hypothesis of no difference between groups (treatment and control). With intervals not containing zero, we can reject the null hypothesis of no differences

between groups and may expect that 95% of the effect size estimates to fall between these values.

Homogeneity of variance estimates were calculated for the effects using the Q statistic (Cooper, 1989). This measure evaluates whether the effect sizes differ significantly more than that expected by sampling error alone. A significant Q statistic implies that the variance in effect sizes would be due to factors other than sampling error. Otherwise, a non-significant Q statistic attributes the variance in effect sizes to sampling error. A significant variance effect jeopardizes the interpretability and robustness of the results.

Procedures were also used to test conceptual differences between comparisons. By calculating separate Q statistics for separate subgroupings, and comparing the summed difference of these groupings with the overall Q statistic, the average effects of these groupings may be determined to be homogeneous. With a significant value (Qb), the grouping factor may be contributing to the variance (Cooper, 1989).

Interrater reliability for coding characteristics may be estimated at 95%. Differing perspectives were discussed and eventual agreement was reached in order to achieve the most logically sound method of coding a

particular variable.

Dependent Measures

Dependent measures used by the selected studies included author derived measures (33%), WIST ("What-If" Situations Test - 44%), PSQ (Personal Safety Questionnaire - 50%), WAKIT (What I Know About Touching Inventory - 6%), Touch Discrimination Task (6%), Childrens Knowledge Test (6%), and the Sexual Abuse Knowledge Inventory (6%).

Treatment/Presentation Types

The primary method of each study program presentation included lecture format (50%), BST (Behavioral Skills Training - 25%), and active participation (46%). One study by Wurtele (1986) used independent treatment groups for two different treatments and was included in the BST and active participation categories.

Results

Table 1 displays a summary of the studies used in the current meta-analysis. Eighteen studies presented information applicable for use in calculating an overall effect size for post treatment evaluative condition (posttest) as compared to a delayed treatment control group (follow-up). Only ten studies presented data applicable to a longer term follow up evaluative

condition as compared to the delayed treatment control group. Time delays for this follow-up condition ranged from one to six months following treatment.

Insert Table 1 here

Table 2 displays a summary of the effect sizes for each study. The effectiveness of child sexual abuse prevention programs were described in terms of overall effect sizes for posttest and retention, and for preschool and school age impact.

Insert Table 2 here

Posttest Condition

For the posttest condition, eighteen effect sizes ranged from small (.24) to large (2.20), with an overall weighted effect size of .57. Approximately 72% (U3 measure, Cooper, 1989) of the scores in the control group may be exceeded by the average score of the treatment groups. The confidence interval for the condition ranged from .49 to .65. The interval does not contain the value d=0 and rejection of the null hypothesis of no differences between treatment and control groups may be made. Likewise, an analysis of

the homogeneity of the variances produced a significant Qt value of 40.99 (Chi c.v., .05, 17 df = 27.60) and differences between groups may be due to factors other than sampling error. Table 3 was provided as a summary table of all of the reported effect sizes, confidence intervals, and homogeneity of variance results.

Insert Table 3 here

Follow-up Condition

For follow-up condition, ten effect sizes ranged from small (.22) to large (.82), with an overall weighted effect size of .47. Approximately 68% of the scores in the control group may be exceeded by the average score of the treatment groups. The confidence interval for this condition ranged from .37 to .56. The interval does not contain the value d=0 and rejection of the null hypothesis of no differences between treatment and control groups may be made. An analysis of the homogeneity of the variances produced a non-significant Qt value of 13.54 (Chi c.v., .05, 9 df = 16.90) and the differences between groups may be attributable to sampling error alone.

Preschool and School Age Children

Studies were analyzed for preschool children and

school age children when compared to control group children of analogous ages.

Seven studies ranged from medium (.60) to large (2.20) effect sizes and contributed to an overall weighted large effect size of .81 for preschool children on posttest scores when compared to control groups. Approximately 79% of the control children scores may be exceeded by the average score of the treatment groups. Confidence interval values ranged from .61 to 1.02. The interval does not contain the value d=0 and rejection of the null hypothesis of no differences between groups may be made. An analysis of the homogeneity of the variances produced a non-significant Qt value of 10.76 (Chi c.v., .05, 6 df = 12.60) and differences between groups may be attributable to sampling error alone.

Ten studies comparing school age children to control group children on posttest scores produced effect sizes ranging from small (.24) to large (1.25) with an overall weighted effect size of .48 and approximately 68% of the control group scores may be exceeded by the average score of the treatment groups. Confidence interval values ranged from .40 to .56. The interval does not contain the value d=0 and rejection of the null hypothesis of no differences between groups

may be made. An analysis of the homogeneity of the variances produced a significant Qt value of 30.41 (Chi c.v., .05, 9 df = 16.90) and differences between groups appear not to be attributable to sampling error alone.

Five studies were used in comparing preschool children follow-up scores to control group children with effect sizes ranging from medium (.40) to large (.82) with an overall weighted effect size of .60. Approximately 73% of the control group scores may be exceeded by the average score of the treatment groups. Confidence interval values ranged from .38 to .82. The interval does not include the value d=0 and rejection of the null hypothesis of no differences between groups may be made. An analysis of the homogeneity of the variances produced a non-significant Qt value of 1.67 (Chi c.v., .05, 4 df = 9.49) and differences between groups may be due to sampling error alone.

Five studies were used in comparing school age children follow-up scores to control group children. Effect sizes of the differences ranged from small (.22) to large (.74) with an overall weighted effect size of .44. Approximately 67% of the control group scores may be exceeded by the average score of the treatment groups. Confidence interval values ranged from .34 to .55. The interval does not contain the value d=0 and

rejection of the null hypothesis of no differences between groups may be made. An analysis of the homogeneity of the variances produced a significant Qt value of 10.32 (Chi c.v., .05, 0 df = 9.49) and differences between groups appear not to be due to sampling error alone.

Effects of Program Presentation Type

Studies were grouped by type of presentation. Grouping variables were behavioral skills training (BST), lecture/discussion based programs (LECT), and active participation programs utilizing techniques such as roleplaying. The overall weighted effect size obtained for presentation type was .52. Active participation programs had the largest overall effect (.74) and LECT had the smallest effect size (.40). Overall confidence interval values ranged from .45 to .57. The interval does not contain the value d=0 and the null hypothesis of no differences may be rejected. All the confidence intervals for each individual treatment/presentation type did not contain zero and the null hypotheses of no differences between groups may be rejected.

Discussion

Posttest and Follow-up Scores

Implementing the school-based sexual abuse prevention program appears to have moderately (d.=.57) increased childrens' posttest scores when compared to children from control groups not yet receiving treatment. However, interpretations of the posttest scores must be made with caution due to the significant homogeneity of variance outcome. The variance in effect sizes appear to be significantly different than expected to be due to sampling error and other sources of variation need to be evaluated. Follow-up scores from treatment group children also displayed moderate effects (d.=.46) The significance of the findings may give credence to the positive effects of child sexual abuse prevention training programs. When compared to the moderate effect sizes usually found in educational or social science research, these medium effect size findings may highlight the substantial impact of the effectiveness of these programs.

Observations of an outlier effect size of 1.4 (Conte, 1986) may have inflated the overall effect size slightly, however. Possible reasons for this outlier effect may have been "scare tactics" used on the part of the researchers.

Insert Figure 1 here

Posttest Scores for Preschool and School Age Children

The overall effect size resulting from comparison of preschool prevention program with delayed-control group children were large (d.=.81). This may be attributable to several factors. First, young children enter the program with less experience regarding the topic of sexual abuse, and therefore have more to learn. Secondly, apparent "benefits" may due to a greater "impressionability" of the program on the younger children than the older ones. The younger children may simply be less discriminating about the information absorbed. Conversely, older children may become "bored" more easily and loose interest. Third, the programs orientated towards younger children used more behaviorally based methodology, which research suggests to be a more effective pedagogy (Glover, Ronning, Bruning, 1990). Medium effect sizes were obtained when comparing school age prevention program and school age delayed-control group children (d.=.48). This effect size supports the efficacy of programs for this age group as well.

Insert Figure 2 here

Follow-up Scores for Preschool/School Age Children

The overall effect size for follow-up retention resulting for preschool children was large (d.=.80). Medium effect sizes were obtained for school age children (d.=.44). This suggests that not only are prevention programs immediately influential in teaching personal safety skills, but this information may be retained over a substantial amount of time. In this instance, however, the small number of groups (k=3) may be an biasing factor, and the results need to weighed accordingly.

Effects of Presentation Type

Intrinsic to the possible reasons for the need for presentation type evaluations is the need for developmentally appropriate presentations of sexual abuse prevention information. Likewise, the effects of different programs may need to be examined with respect to the individual differences among children, such as the sex, family microsystems, self-concept, or social skills levels (Wurtele, 1992a). The focus in selecting a program may need to become the particular type of program needed for the particular type of child or

setting.

Our findings implied that behaviorally based methods, such as BST, result in greater conceptual knowledge regarding sexual abuse prevention than other methods. This finding confirms much of educational research which asserts that behavioral methods result in higher achievement scores than presentation or lecture only techniques (Glover, et al., 1990). Film/multimedia programs had a similar effect, but this "method" contained a broader range of activities as well. These programs also included role playing, group discussion and lecture. As a result, interpretation of the effects of this treatment group may be difficult due to the influence of extraneous factors. Pedagogy stressing behaviorally based approaches may convey prevention knowledge more readily. Finally, presentation methods received the lowest, even though still moderate, effect size. This implies that even the most basic instruction may convey personal safety skills and strategies.

Conclusion

It is the conclusion of this meta-analysis that brief child sexual abuse prevention programs have a substantial overall effect on student knowledge of personal safety skills and strategies. This effect

continues into a longer term retention of these concepts, with a slight variation in effectiveness for different age groups. Preschool children appear to be impacted more by this pedagogy. Each presentation method studied, while differentially effective, contributed to student knowledge. The implications of these findings may be that brief treatment programs may be an effective, economical method of imparting sexual abuse prevention strategies to children. Directions for future research may be to investigate the most appropriate methods that fit an individual child's needs. Hopefully meta-analytic methods may continue to organize existing studies and guide such research.

Table 1

Study No.	Author, Date	n=control/ n=treatmt	Ages (yrs.)/ (Grades)	Treatmt. Type	Post/ Follow-up	Dependent Meas.	Effect Size Post/Follow-up
1	Conte,1985	10/10	4,5,6-10	L,D	P only	author based	1.4
2	Wolfe, 1986	145/145	(4,5th)	D,SP	P only	author based	0.38
3	Harvey,1988	36/35	5-8	L,F	P, F	author based	.75/.82
4	Grendel,1991	49/51	6-8	D,F	P only	WIST, PSQ	0.42
5	Hazzard,1991	151/371	(3,4th)	D,F,R	P, F	WIKAT	1.0/.74
6	Wurtele,1992a	44/41	(preschool)	BST	P, F	WIST, PSQ	.79/.62
7	Kolko,1987	41/298	7-11	L,D	P, F	author based	.24/.22
8	Kolko,1989	35/213	7-10	L,F	P, F	author based	.33/.37
9	Saslawsky,1986	34/33	(K,1,5,6)	D,F	P only	WIST, PSQ	0.65
10	Wurtele,1986	18/53	(K,1,5,6)	BST/BST,F	P only	WIST, PSQ	0.52
11	Wurtiel,1989	31/69	(preschool)	BST	P, F	WIST	.59/.40
12	Wurtiel,1990	12/12	(preschool)	BST	P, F	WIST, PSQ	.67/.65
13	Blumberg,1991	174/75	(K,1,2,3)	F/R	P only	TDT	0.41
14	Wurtele,1992b	21/22	(preschool)	L,BST,AI	P, F	WIST,PSQ	.83/.58
15	A-Varney,1988	10/15	4	AI,SP	P only	WIST, PSQ	2.2
16	Crowley,1989	136/157	(4, 5th)	L,D,F	P, F	SAKI, PSQ	.48/.51
17	Snyder,1986	81/96	(4th)	L,D,R	P only	author based	0.67
18	Kindt,1991	287/596	(3rd)	D,F,R	P, F	CKT, PSQ	.49/.36

Dependent Measures

WIST = "What If" Situations Test
TDT = Touch Discrimination Task
PSQ = Personal Safety Questionaire
WAKIT = What I Know About Touching
SAKI = Sexual Abuse Knowledge Inventory
CKT = Childrens Knowledge Test
Author based = author derived measurement

Treatment Type

L = lecture or story format
D = group/class discussion
F = film shown
BST = behavioral skills training
R = roleplaying utilized
AI = active involvement
SP = skit or play

BEST COPY AVAILABLE

Table 2 : Cumulative Effect Sizes for Each Study

			Preschool (4-5 years)		School Age (6-11 years)	
Study	Posttest	Follow-Up	Posttest	Follow-up	Posttest	Follow-up
Overall Weighted	0.57	0.47	0.81	0.60	0.48	0.44
Conte	1.40		1.56		1.25	
Wolfe	0.38				0.38	
Harvey	0.75	0.82	0.75	0.82		
Grendel	0.42				0.42	
Hazzard	1.00	0.74			1.00	0.74
Wurtele, 1992a	0.79	0.62	0.75	0.62		
Kolko, 1987	0.24	0.22			0.24	0.22
Kolko, 1989	0.33	0.37			0.33	0.37
Saslawsky	0.65					
Wurtlel, 1986	0.52					
Wurtele, 1989	0.59	0.40	0.60	0.40		
Wurtele, 1990	0.67	0.65	0.67	0.67		
Blumberg	0.41				0.41	
Wurtele, 1992b	0.83	0.58	0.83	0.58		
Anderson-Varney	2.20		2.20			
Crowley	0.48	0.51			0.48	0.51
Snyder	0.67				0.67	
Kindt	0.49	0.36			0.36	0.36

TABLE 3

VARIABLE	OVERALL WEIGHTED EFFECT SIZE	CONFIDENCE INTERVAL 95%	HOMOGENEITY	DF	CHI-SQUARE .05
TIME OF TESTING					
POSTTEST	.57	.49 : .65 *	40.99	17	27.60**
FOLLOW UP(1-6m)	.46	.37 : .56 *	13.54	9	16.90
DIFFERENT AGES AT TIME OF POSTTEST					
PRE-SCHOOL	.81	.61 : 1.02 *	10.76	6	12.60
SCHOOL AGE	.48	.40 : .56 *	30.41	9	16.90**
DIFFERENT AGES AT TIME OF FOLLOW UP (1-6 MONTHS)					
PRE-SCHOOL	.60	.38 : .82 *	1.67	4	9.49
SCHOOL AGE	.44	.34 : .55 *	10.32	4	9.49**
TYPE OF PRESENTATION					
OVERALL	.52	.45 : .57 *			
LECTURE	.40	.29 : .51 *	11.97	9	16.90
BST FOCUS	.07	.44 : .89 *	1.89	4	9.49
ACTIVE PARTIC.	.74	.61 : .87 *	18.44	4	9.49**
CONCEPTUAL GROUPING (Qb)			203.20	2	5.99**

$d_. = \xi dw / \xi w$ = overall weighted effect size

$w^i = 2(n_t + n_c)\, n_t n_c / 2(n_t + n_c)^2 + n_t n_c d^2$ = weighting factor used for the individual d-indexes when calculating the weighted effect sizes

$CId_{.95} = d_. \pm 1.96 \sqrt{1/n \xi w}$ = confidence internval for the average effect size estimate

$Q_t = \xi d^2 w - (\xi wd)^2 / \xi w$ = homogeneity test statistic

Q_w = sum of $Q_{conceptual\ groupings}$

$Q_b = Q_t - Q_w$

* = value "d=0" not in interval, null hypothesis of no differences rejected

** = homogeneity not found, differences may be due to factors other than sampling error

BEST COPY AVAILABLE

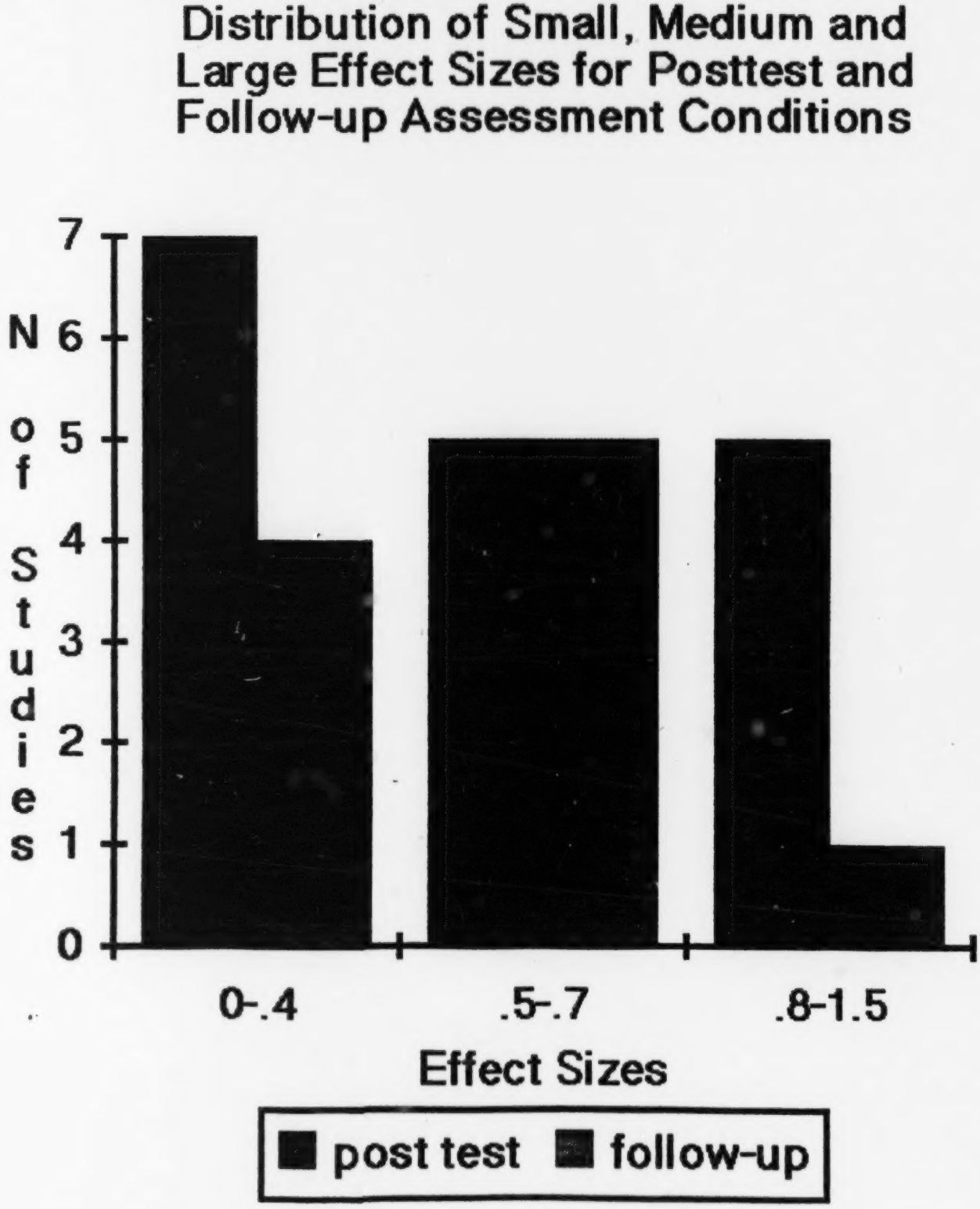
Distribution of Small, Medium and Large Effect Sizes for Posttest and Follow-up Assessment Conditions
N of Studies
7
6
5
4
3
2
1
0
0-.4
.5-.7
.8-1.5
Effect Sizes
post test
follow-up

FIGURE 1

Distribution of Small, Medium and Large Effects Sizes for Preschool and School Age Children in Posttest and Follow-up Conditions

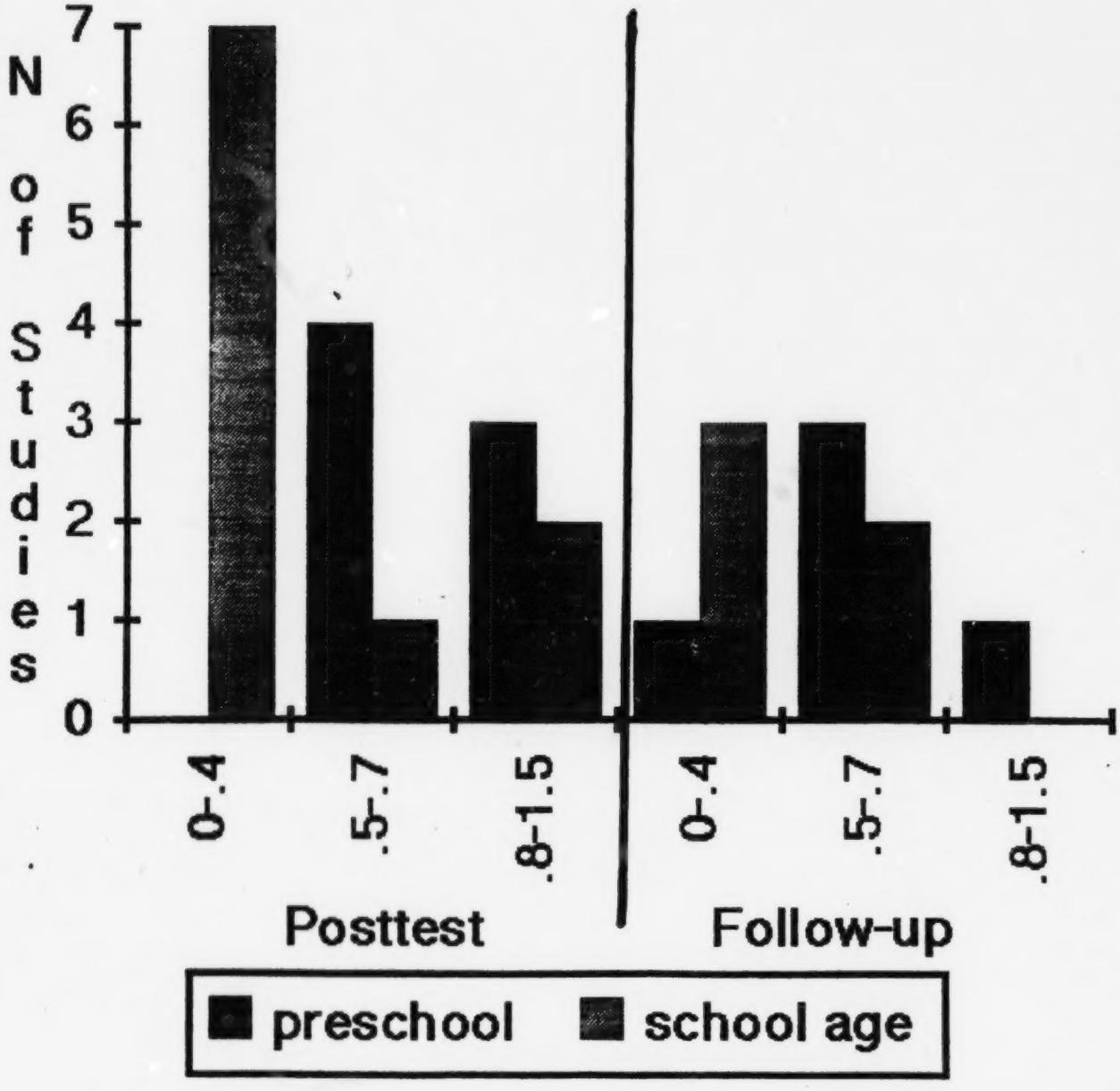

FIGURE 2

References

Anderson-Varney, T. (1988). The evaluation of a personal safety curriculum for preschoolers. Masters thesis, Michigan State University.

Blumberg,E., Chadwick, M., Fogarty, L., Speth, T., Chadwick, D. (1991). The Touch Discrimination Component of Sexual Abuse Prevention Training. Journal of Interpersonal Violence, 6, 12-28.

Conte, J.R., Rosen, C., Saperstein, L. (1986). An analysis of programs to prevent the sexual victimization of children. Journal of Primary Prevention, 6(3), 141-155.

Conte, J.R., Rosen, C., Saperstein, L., Shermack, R. (1985). An evaluation of a program to prevent the sexual victimization of young children. Child Abuse and Neglect, 9, 319-328.

Cooper, H.M. (1989). Integrating Research: A Guide for Literature Reviews, second edition. Sage Publications, Inc.

Crowley, K. (1989). Evaluation of Good Touches/Bad Touches: A Program to Prevent Child Sexual Abuse in School Age Children. Doctoral dissertation, Pace University.

Glover, J., Ronning, R., Bruning, R. (1990). Cognitive Psychology for Teachers. New York: MacMillian.

Grendel, M.A. Cognitive and Emotional Effects of a Brief Child Sexual Abuse Prevention Program for First Graders. Unpublished dissertation. University of Cincinnati, 1991.

Harvey, P., Forehand, R., Brown, C., Holmes, T. (1988). The prevention of sexual abuse: examination of the effectiveness of a program with kindergarten-age children. Behavior Therapy, 19, 429-435.

Hazzard, A., Webb, C., Kleemeier, C., Angert, L., Pohl, J. (1991). Child sexual abuse prevention: Evaluation and one-year follow-up. Child Abuse and Neglect, 15, 123-138.

Hedges, L.V., Shymansky, J.A., Woodworth, G. (1989). A Practical Guide to Modern Methods of Meta-Analysis. National Science Teachers Association.

Kindt, M. (1991). Follow-up evaluation of a school based sexual abuse prevention program. Masters thesis, Bowling Green State University.

Kolko, D.J., Moser, J.T., Litz, J., Hughes, J. (1987). Promoting

awareness and prevention of child sexual victimization using the red flag/green flag program: An evaluation with follow-up. Journal of Family Violence, 2(1), 11-35.

Kolko, D.J., Moser, J.T., Hughes, J. (1989). Classroom training in sexual victimization awareness and prevention skills: An extension of the red flag/green flag people program. Journal of Family Violence, 4(1), 25-45.

Saslawsky, D.A., Wurtele, S.K. (1986). Educating children about sexual abuse: Implications for pediatric intervention and possible prevention. Journal of Pediatric Psychology, 11(2), 235-245.

Snyder, C. (1986). An Evaluation of the "Good Secrets, Bad Secrets" Sexual Assault Prevention Program. Doctoral dissertation, United States International University.

Tutty, L. (1991). An investigation of the ability of elementary school-aged children to learn child sexual abuse prevention concepts. Doctoral dissertation, Wilfrid Laurier University.

Wolfe, D.A., MacPherson, T., Blount, R., Wolfe, V.V. (1986). Evaluation of a brief intervention for educating school children in awareness of physical and sexual abuse. Child Abuse and Neglect, 10, 85-92.

Wurtele, S. K., Saslawsky, D. A., Miller, C. L., Marrs, S. R., Britcher, J. C. (1986). Teaching personal safety skills for potential prevention of sexual abuse: A comparison of treatments. Journal of Consulting and ClinicalPsychology, 54(5), 688-692.

Wurtele, S.K. (1987a). School-based sexual abuse prevention programs: A review. Child Abuse and Neglect, 11, 483-495.

Wurtele, S.K., Kast, L.C., Miller-Perrin, C.L., Kondrick, P.A. (1989). Comparison of programs for teaching personal safety skills to preschoolers. Journal of Consulting and Clinical Psychology, 57(4), 505-511.

Wurtele, S.R. (1990). Teaching personal safety skills to four-year-old children: A behavioral approach. Behavior Therapy, 21, 25-32.

Wurtele, S.R. (1990a). Evaluating programs designed to prevent child sexual abuse: Measuring the six R's. Paper presented at the 8th International Congress on Child Abuse and Neglect, September, 1990. Hamburg, Germany.

Wurtele, S.R., Kast, L.C., Melzer, A.M. (1992a). Sexual abuse prevention education for young children: A comparison for teachers and parents as instructors. Child Abuse and Neglect, 16, 865-876.

Wurtele, S., Gillispie, E., Currier, L., Franklin, C. (1992b). A comparison of teachers vs. parents as instructors of a personal safety program for preschoolers. Child Abuse and Neglect, 16, 127-137.

Wurtele, S.R., Miller-Perrin, C.L. (1992). Preventing Child Sexual Abuse: Sharing the Responsibility. University of Nebraska Press.